

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference MBHB00 - 878 - J	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2004/026930	International filing date (day/month/year) 20/08/2004	(Earliest) Priority Date (day/month/year) 23/10/2003
Applicant  SIRNA THERAPEUTICS, INC.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☒ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☒ **Unity of invention is lacking** (see Box III).

**4. With regard to the title,**

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

**5. With regard to the abstract,**

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

**6. With regard to the drawings,**

- a. the figure of the **drawings** to be published with the abstract is Figure No. \_\_\_\_\_

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☒ none of the figures is to be published with the abstract.

**Best Available Copy**

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2004/026930

## Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
  - a. type of material
    - ☒ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material
    - ☐ in written format
    - ☒ in computer readable form
  - c. time of filing/furnishing
    - ☐ contained in the international application as filed
    - ☐ filed together with the international application in computer readable form
    - ☒ furnished subsequently to this Authority for the purpose of search
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/11 C12P19/34 C07H21/02 C07H21/04 A61P31/00  
A61K31/713

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, EMBASE, BIOSIS

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/081628 A (RIBOZYME PHARMACEUTICALS, INCORPORATED; BLATT, LAWRENCE; CHOWRIRA, BHA) 17 October 2002 (2002-10-17) page 9, lines 3-22 page 20, line 34 - page 21, line 8 -----	1-32, 34
X	WO 03/074654 A (SIRNA THERAPEUTICS, INC; MCSWIGGEN, JAMES; BEIGELMAN, LEONID; CHOWRIRA) 12 September 2003 (2003-09-12) page 136, lines 25,26 -----	1-32, 34
X	WO 03/070918 A (RIBOZYME PHARMACEUTICALS, INCORPORATED; MCSWIGGEN, JAMES; BEIGELMAN, L) 28 August 2003 (2003-08-28) page 126, lines 2,3 -----	1-32, 34

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

31 May 2005

Date of mailing of the international search report

28. 09. 05

Name and mailing address of the ISA

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Authorized officer

Barnas, C

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2004/026930

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
1-32, 34

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

## 1. claims: 1-32, 34

A double stranded short interfering nucleic acid (siNA) molecule that directs cleavage of a NOGO receptor RNA via RNA interference as described in claim 1.

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## 2. claims: 33, 35

A double stranded short interfering nucleic acid (siNA) molecule that directs cleavage of a NOGO receptor RNA via RNA interference wherein said siNA comprises any of SEQ ID NOs: 1-33, 100-132.

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## 3. claims: 33, 35

A double stranded short interfering nucleic acid (siNA) molecule that directs cleavage of a NOGO receptor RNA via RNA interference wherein said siNA comprises any of SEQ ID NOs: 34-66, 133-165.

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## 4. claims: 33, 35

A double stranded short interfering nucleic acid (siNA) molecule that directs cleavage of a NOGO receptor RNA via RNA interference wherein said siNA comprises any of SEQ ID NOs: 67-99, 166-198.

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## 5. claims: 33, 35

A double stranded short interfering nucleic acid (siNA) molecule that directs cleavage of a NOGO receptor RNA via RNA interference wherein said siNA comprises any of SEQ ID NOs: 199-320.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/026930

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 02081628	A	17-10-2002	EP 1386004 A2	04-02-2004
WO 03074654	A	12-09-2003	AU 2003207708 A1	09-09-2003
			AU 2003211082 A1	09-09-2003
			AU 2003213163 A1	09-09-2003
			AU 2003216311 A1	09-09-2003
			AU 2003216315 A1	09-09-2003
			AU 2003216324 A1	16-09-2003
			AU 2003217594 A1	09-09-2003
			AU 2003219712 A1	09-09-2003
			AU 2003219751 A1	09-09-2003
			AU 2003221258 A1	09-09-2003
			AU 2003247204 A1	09-09-2003
			CA 2455447 A1	12-09-2003
			CA 2459532 A1	28-08-2003
			CA 2476112 A1	28-08-2003
			EP 1432724 A1	30-06-2004
			EP 1476574 A2	17-11-2004
			EP 1476458 A2	17-11-2004
			EP 1472267 A2	03-11-2004
			EP 1458741 A2	22-09-2004
			EP 1472269 A1	03-11-2004
			EP 1470256 A2	27-10-2004
			EP 1549660 A2	06-07-2005
			EP 1470257 A2	27-10-2004
			EP 1423406 A2	02-06-2004
			GB 2396616 A	30-06-2004
			GB 2397818 A	04-08-2004
			JP 2005517438 T	16-06-2005
			JP 2005518803 T	30-06-2005
			WO 03072704 A2	04-09-2003
			WO 03070886 A2	28-08-2003
			WO 03070744 A1	28-08-2003
			WO 03070968 A2	28-08-2003
			WO 03070903 A2	28-08-2003
			WO 03070970 A2	28-08-2003
			WO 03070911 A2	28-08-2003
			WO 03070914 A2	28-08-2003
WO 03070918	A	28-08-2003	NONE	

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